

We Claim:

1. A flexible fluid containment vessel for the transportation and/or containment of cargo comprising a fluid or fluidisable material, said vessel comprising:

an elongated flexible tubular structure comprised of fabric having a first side and a second side;

10 said tubular structure having a front end and a rear end;

means for sealing said front end and said rear end;

means for filling and emptying said vessel of cargo; and

15 means for rendering said tubular structure impervious comprising forming said fabric out of yarns or fibers having a thermoplastic coating wherein said first side is formed predominantly out of yarns or fibers having a first thermoplastic coating and said second side is formed predominantly 20 out of yarns or fibers having a second thermoplastic coating which is different from the first thermoplastic coating and causing the thermoplastic coatings to fill voids between the yarns or fibers 25 to render the coated fabric impervious.

2. The vessel in accordance with claim 1 wherein said fabric is woven and said first and second side are formed by stitching points.

30 3. The vessel in accordance with claim 1 wherein said thermoplastic coating is subject to heat,

pressure or both to cause it to flow and fill the voids.

4. The vessel in accordance with claim 1 wherein
5 said first thermoplastic coating and said second
thermoplastic coating are taken from the group
consisting essentially of urethane, polyester,
polyamide, polyvinyl chloride, polyolefin or other
suitable thermoplastic material.

10 5. A flexible fluid containment vessel for the
transportation and/or containment of cargo
comprising a fluid or fluidisable material, said
vessel comprising:
15 an elongated flexible tubular structure
comprised of fabric;
said tubular structure having a front end and a
rear end;
means for sealing said front end and said rear
20 end;
means for filling and emptying said vessel of
cargo; and
means for rendering said tubular structure
impervious and buoyant comprising coating said
25 fabric with a coating having microspheres therein in
a sufficient amount that the overall density of the
coated fabric is less than approximately 1.0 g/cm³.

30 6. The vessel in accordance with claim 5 wherein
said coating is taken from the group consisting
essentially of: polyvinyl chloride, polyurethanes,
synthetic and natural rubbers, polyureas,

polyolefins, silicone polymers, acrylic polymers or foam derivatives thereof.

7. The vessel in accordance with claim 5 wherein
5 said coating is a thermoplastic or thermoset material.

8. A flexible fluid containment vessel for the transportation and/or containment of cargo
10 comprising a fluid or fluidisable material, said vessel comprising:

an elongated flexible tubular structure comprised of fabric;

15 said tubular structure having a front end and a rear end;

means for sealing said front end and said rear end;

means for filling and emptying said vessel of cargo; and

20 means for rendering said tubular structure impervious and buoyant comprising coating said fabric with a coating having a gas or entrained air in the coating such that the gas or air is trapped within the coating in a sufficient amount that the overall density of the coated fabric is less than
25 approximately 1.0 g/cm³.

9. The vessel in accordance with claim 8 wherein the coating is applied to the fabric by spraying or
30 in the form of a foam.

10. The vessel in accordance with claim 8 wherein said coating is taken from the group consisting

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essentially of: polyvinyl chloride, polyurethanes,
synthetic and natural rubbers, polyureas,
polyolefins, silicone polymers, acrylic polymers or
foam derivatives thereof.

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11. The vessel in accordance with claim 10 wherein
said coating is a thermoplastic or thermoset
material.

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